

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/116,589

REMARKS

Summary of the Office Action

Claims 28, 29, and 64-66 are pending in the application.

In response to the Amendment filed September 8, 2004 and the RCE filed November 8, 2004, the Examiner removed all of the previous claim rejections. The current status of the claims is the following.

Claims 28, 29, and 64-66 are objected to because the claims allegedly fail to provide structural and logical relationships among the various terms recited in the claims.

Claims 28, 64 and 65 are rejected under 35 U.S.C. § 103(a) as being unpatentable over previously-cited Wreede et al. (US 5,499,118) in view of previously-cited Dausmann et al. (US 5,825,514), previously-cited Moss et al. (US 5,016,953) and newly-cited Weber (US 3,647,289).

Claims 29 and 66 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wreede et al. in view of Moss et al. and Weber.

Analysis of Claim Objections and Rejections

With regard to the objection to the claims, Applicant submits that claims 28-29 and 64-66 provide logical and structural relationships. In the amendment, the language “which is an imagewise or other pattern-recorded medium comprising a collection of pixels, and in which any one of a plurality of volume type diffraction gratings comprising volume holograms and differing from each other is assigned to at least a part of said pixels,” is deleted from independent claims 28 and 29. Further, in claims 28 and 29 is added the language that the hologram-recorded

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medium is fabricated from a photosensitive material capable of recording a volume hologram.

The recitation of a method of fabricating a hologram-recorded medium from a photosensitive material capable of recording a volume hologram makes clear the relationship between the hologram-recorded medium and the photosensitive material.

Further, claim 28 clearly indicates that the interference fringes are produced in the photosensitive material by interference of light diffracted from the reflection type relief holograms. Likewise, claim 29 clearly indicates that the interference fringes are produced in the photosensitive material by interference of light diffracted from the transmission type holograms.

Accordingly, Applicant submits that the structural and logical relationships between the terms recited in the claims are provided by the claims.

In rejecting claims 28 and 29 under 35 U.S.C. § 103 over a combination of references, the Examiner cites the Weber reference as allegedly disclosing “a dichroic filter comprising a multilayer interference film, said dichroic filter being stacked on” The Examiner refers to col. 4, line 45 – col. 5, line 49 of Weber. Specifically, the Examiner points to the optical filter 23 as corresponding to the claimed dichroic filter. The Examiner asserts that it would have been obvious to apply the teachings of Weber to add an optical dichroic filter between the relief master hologram and the photosensitive material to suppress unwanted diffraction or undiffracted light reconstructed from the master hologram to enter the photosensitive material to prevent noise from being recorded in the material. Applicant respectfully submits that the combination of references does not render the claimed invention obvious.

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Regarding the optical filter of USP 3,647,289 as newly cited, this seems to be used for the purpose of attenuating the incident light entering at a certain angle. (In Fig. 3, the incident light 21 entering at an angle of ϕ is attenuated by the optical filter 23, and it is turned to 21'.) In contrast, in the dichroic filter of the present invention, high-order diffraction light is cut off and the recording of unnecessary interference fringes is prevented as described in the specification. Therefore, it is entirely different from the optical filter of USP 3,647,289 in both the functions and the intended purpose. Applicant submits that it would not have been obvious to combine the filter of the '289 patent with the teachings of the other references to achieve Applicant's invention. At least for this reason, Applicant submits that claims 28 and 29, as well as dependent claims 64 and 65, are patentable over the applied references.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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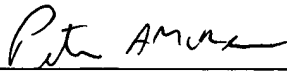
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